

BRITISH TELECOMMUNICATIONS ENGINEERING

INDEX

VOLUME 12
(April 1993–January 1994)

including
TELECOMMUNICATIONS ENGINEERING: A Structured Information Programme
Issues 8–11

(Units from the *Structured Information Programme* are indicated by 'S' followed by the Chapter and Unit numbers.)

A

Access Signalling, ISDN 302
Access Network Technology: Design Principles S10.2
Account Management in BT 82
Account Management, Systems Engineering in BT's 87
Account Management—The Bid Manager, Systems Engineering in BT's 183
Act, New Road and Street Works 122
Addressing, Numbering and S9.5
Analyser, Assessment of Network Performance: The ISDN2 Performance 110
Analysis—Part 1, Outsourcing Service and Information Technology 132
Analysis—Part 2, Outsourcing Service and Information Technology 222
ANDREWS, MIKE; ANWAR, M. ASIF; COLE, ROGER; and REIFFER, GUY. BT Northern Ireland STAR SDH Network—NISTAR 207
ANWAR, M. ASIF; ANDREWS, MIKE; COLE, ROGER; and REIFFER, GUY. BT Northern Ireland STAR SDH Network—NISTAR 207
Apparatus—Gateway to the Network 260
Appraisal, Investment S4.4
Architecture, Standards for ISDN 114
Assessment of Network Performance: The ISDN2 Performance Analyser 110
Asynchronous Transfer Mode S6.3
AVENDAÑO, MANUEL; and HAMELBERG, PETER. New Cooperative Framework for European Public Network Operators, A ... 141
Awards for Volume 11, Journal 315

B

BANKS, COLIN. Account Management in BT 82
BANKS, COLIN; and MIKKELSON, MIKE. Systems Engineering in BT's Account Management—The Bid Manager 183
BANKS, COLIN. Systems Engineering in BT's Account Management 87
BAYLEY, KEN; and MILLS, GRAHAM. Corporate Visual Services—An Overview 97
Benchmarking, Practical 290
Bid Manager, Systems Engineering in BT's Account Management—The 183
BIMPSON, ALAN. Standardisation of Services for the ISDN 56
BOND, MELV; GARRETT, SIMON; and DANGERFIELD, WILLIAM. Caller Display and Call Return 176
Book Reviews 79, 158, 238, 326
BORWICK, DICK; and RICHARDS, BILL. Submarine Cable Systems 272
Broadband—Liberating the Customer 252
Broadcast and Satellite Services, BT 200
BT Broadcast and Satellite Services 200
BT Global Network, The 162
BT News 76, 154, 232, 319
BT Northern Ireland STAR SDH Network—NISTAR 207
BT's Global Networks, The Role of Satellite Communications in 278
BT's Internal Network 22
BT's Telex Network: Past Present—and Future? 17
BT's World Consultancy Service, Telconsult: 189
Business Model, The Telecommunications S4.3

C

Cable Systems, Submarine 272
Call Return, Caller Display and 176
Caller Display and Call Return 176
CHEESEMAN, CHRIS. Spectrum Management S16.3
CHERRETT, PAUL. Practical Benchmarking 290
CHIA, STANLEY. Network Operational Principles for Third-Generation Mobile Systems 62
CLARK, PETER G. ISDN Standards: An Overview 47
COCHRANE, PETER; FISHER, KIM; and TAYLOR-HENDRY, ROB. The Office You Wish You Had 91
Coding of HDTV and TV, A Method for Compatible 146
COLE, ROGER; ANDREWS, MIKE; ANWAR, M. ASIF; and REIFFER, GUY. BT Northern Ireland STAR SDH Network—NISTAR 207
COLEMAN, PETER; and RUSSELL, SID. New Road and Street Works Act 122
Collaborative R&D in European Telecommunications, EURESCOM—A New Opportunity for 294
COLLINS, JIM. Moorgate Frame Cleanse 317
Communications Facilities Management, Outsourcing and 71
Communications, Future Trends in Fibre-Based Optical S5.4
Communications in BT's Global Networks, The Role of Satellite 278

Communications in the 21st Century, I'll Be Seeing You: Multimedia ... 242
Communications Services, PC-Based Visual ... 266
Compatible Coding of HDTV and TV, A Method for ... 146
Congress, 32nd European Telecommunications ... 312
Consultancy Service, Telconsult: BT's World ... 189
Cooperative Framework for European Public Network Operators, A New ... 141
Corporate Visual Services—An Overview ... 97
COULDREY, MALCOLM. Payphone Activities and Developments in North Downs ... 318
COXHEAD, PAUL; and STUART, ALAN. Role of Satellite Communications in BT's Global Networks, The ... 278
CRACKETT, JOHN. ISDN in the Dealing Room ... 102
Customer, Broadband—Liberating the ... 252
Customer Satisfied, Trying to Keep the ... 285
Customer Service: The Differentiator for the 1990s, Marketing ... 2

D

DANGERFIELD, WILLIAM; GARRETT, SIMON; and BOND, MELV. Caller Display and Call Return ... 176
DAVIS, CHRIS; HARTILL, JOHN; and MARSHALL, ALAN. Robotic Duty Cycle Testing of Payphones ... 32
Dealing Room, ISDN in the ... 102
Design Principles, Access Network Technology: ... S10.2
Digital Circuit Multiplication and Low Rate Encoding, Transmission Quality of ... 38
Digital Line-of-Sight Radio Service, Provision of an Offshore .. 9
Digital Network, Network Management in a Modern ... S13.3
Digital Network, The Integrated Services ... S9.4
Display and Call Return, Caller ... 176
DREWE, CHRIS. BT's Telex Network: Past Present—and Future? 17
D'SA, DINO; and LOWE, ALAN. Planning the International Network ... 165
Duty Cycle Testing of Payphones, Robotic ... 32

E

ELLIOTT, DAVID; and FREEMAN, MIKE. Provision of an Offshore Digital Line-of-Sight Radio Service ... 9
Engineer an Endangered Species?, Is the Telco ... 67
Engineering in BT's Account Management, Systems ... 87
Engineering in BT's Account Management—The Bid Manager, Systems ... 183
EURESCOM—A New Opportunity for Collaborative R&D in European Telecommunications ... 294
European Public Network Operators, A New Cooperative Framework for ... 141
European Telecommunications Congress, 32nd ... 312
European Telecommunications, EURESCOM—A New Opportunity for Collaborative R&D in ... 294

F

Facilities Management, Outsourcing and Communications ... 71
Facsimile ... S11.4
FARQUHARSON, ALISTAIR; and KESSLER, EDWARD. Transmission Quality of Digital Circuit Multiplication and Low Rate Encoding ... 38
Fibre-Based Optical Communications, Future Trends in ... S5.4
Field Focus
Harlow TPON Pilot Project ... 316
Moorgate Frame Cleanse ... 317
Payphone Activities and Developments in North Downs .. 318
Screen-Based Planning ... 318
FISHER, KIM; COCHRANE, PETER; and TAYLOR-HENDRY, ROB. The Office You Wish You Had ... 91
FOGARTY, KEVIN D.; and KATZEFF, KURT. EURESCOM—A New Opportunity for Collaborative R&D in European Telecommunications ... 294
Frame Cleanse, Moorgate ... 317
FREEMAN, MIKE; and ELLIOTT, DAVID. Provision of an Offshore Digital Line-of-Sight Radio Service ... 9
Future Trends in Fibre-Based Optical Communications ... S5.4

G

GALLAGHER, IAN; and WARDLAW, MALCOLM. Asynchronous Transfer Mode ... S6.3
GARRETT, SIMON; DANGERFIELD, WILLIAM; and BOND, MELV. Caller Display and Call Return ... 176
Gateway to the Network, Apparatus— ... 260
Global Network, The BT ... 162
Global Networks, The Role of Satellite Communications in BT's ... 278
GREEN, STEVE; and ROOK, TED. BT's Internal Network ... 22
GREENOP, DAVID; PEARSON, IAN; and JOHNSON, TREVOR. Broadband—Liberating the Customer ... 252
GRIFFITHS, DAVE; and MILLS, GRAHAM. PC-Based Visual Communications Services ... 266
GRIFFITHS, JOHN, M. Integrated Services Digital Network, The S9.4

H

HALTON, KEITH. Facsimile ... S11.4
HAMELBERG, PETER; and AVENDAÑO, MANUEL. New Cooperative Framework for European Public Network Operators, A .. 141
Harlow TPON Pilot Project ... 316
HARTILL, JOHN; MARSHALL, ALAN; and DAVIS, CHRIS. Robotic Duty Cycle Testing of Payphones ... 32
HDTV and TV, A Method for Compatible Coding of ... 146
HEAD, MICK; WHITE, PAUL; and MORGAN, NEIL. SuperJANET—A Strategic Partnership ... 216
HILTON, RONALD D; and NIE, TUN CHUN. Outsourcing Service and Information Technology Analysis—Part 1 ... 132
HILTON, RONALD D; and NIE, TUN CHUN. Outsourcing Service and Information Technology Analysis—Part 2 ... 222
HOGBEN, DAVID. Telecommunications Regulations in the UK .. S16.1
HUMPHREYS, ANDY; and QUAYLE, ALAN. Method for Compatible Coding of HDTV and TV, A ... 146

I

IBTE ... 80, 159, 239, 328
I'll Be Seeing You: Multimedia Communications in the 21st Century ... 242
Industry News ... 78, 156, 236, 322
Information Technology Analysis—Part 1, Outsourcing Service and ... 132
Information Technology Analysis—Part 2, Outsourcing Service and ... 222
Integrated Services Digital Network, The ... S9.4
Internal Network, BT's ... 22
International Network, Planning the ... 165
Investment Appraisal ... S4.4
Is the Telco Engineer an Endangered Species? ... 67
ISDN Access Signalling ... 302
ISDN Architecture, Standards for ... 114
ISDN in the Dealing Room ... 102
ISDN, Standardisation of Services for the ... 56
ISDN Standards: An Overview ... 47
ISDN2 Performance Analyser, Assessment of Network Performance, The ... 110

J

JOHNSON, TREVOR; PEARSON, IAN; and GREENOP, DAVID. Broadband—Liberating the Customer ... 252
Journal Awards for Volume 11 ... 315

K

KANE, ALFIE. The Engineering Challenge (Guest Editorial, April 1993) ... 1
KATZEFF, KURT, and FOGARTY, KEVIN D. EURESCOM—A New Opportunity for Collaborative R&D in European Telecommunications ... 294
KENT, TREVOR. Standards for ISDN Architecture ... 114
KESSLER, EDWARD; and FARQUHARSON, ALISTAIR. Transmission Quality of Digital Circuit Multiplication and Low Rate Encoding ... 38

L

LAW, BRIAN; and WILLIAMS, KEITH. ISDN Access Signalling ... 302
Liberating the Customer, Broadband— ... 252
Line-of-Sight Radio Service, Provision of an Offshore Digital ... 9
LISLE, PETER; MARSHALL, JOHN; and PARSONS, TIMOTHY. Access Network Technology: Design Principles ... S10.2
Low Rate Encoding, Transmission Quality of Digital Circuit Multiplication and ... 38
LOWE, ALAN; and D'SA, DINO. Planning the International Network ... 165
LYSAGHT, JOHN. Is the Telco Engineer an Endangered Species? 67

M

MAHON, ADRIAN. Marketing Customer Service: The Differentiator for the 1990s ... 2

Management in a Modern Digital Network, Network S13.3
Management in BT, Account 82
Management, Outsourcing and Communications Facilities 71
Management, Spectrum S16.3
Management, Systems Engineering in BT's Account 87
Management—The Bid Manager, Systems Engineering in BT's Account 183
Marketing Customer Service: The Differentiator for the 1990s 2
MARSHALL, ALAN; DAVIS, CHRIS; and HARTILL, JOHN. Robotic Duty Cycle Testing of Payphones 32
MARSHALL, JOHN; LISLE, PETER; and PARSONS, TIMOTHY. Access Network Technology: Design Principles S10.2
MCLEOD, ALISTAIR. Numbering and Addressing S9.5
Method for Compatible Coding of HDTV and TV, A 146
MIKKELSON, MIKE; and BANKS, COLIN. Systems Engineering in BT's Account Management—The Bid Manager 183
MILLS, GRAHAM; and BAYLEY, KEN. Corporate Visual Services—An Overview 97
MILLS, GRAHAM; and GRIFFITHS, DAVE. PC-Based Visual Communications Services 266
Mobile Systems, Network Operational Principles for Third-Generation 62
Model, The Telecommunications Business S4.3
Modern Digital Network, Network Management in a S13.3
MORGAN, NEIL; HEAD, MICK; and WHITE, PAUL. SuperJANET—A Strategic Partnership 216
Moorgate Frame Cleanse 317
Multimedia Communications in the 21st Century, I'll Be Seeing You: 242

N

Network, Apparatus—Gateway to the 260
Network, BT's Internal 22
Network Management in a Modern Digital Network S13.3
Network—NISTAR, BT Northern Ireland STAR SDH 207
Network Operational Principles for Third-Generation Mobile Systems 62
Network Operators, A New Cooperative Framework for European Public 141
Network: Past Present—and Future?, BT's Telex 17
Network Performance: The ISDN2 Performance Analyser, Assessment of 110
Network, Planning the International 165
Network Technology: Design Principles, Access S10.2
Network, The BT Global 162
Network, The Integrated Services Digital S9.4
Networks, The Role of Satellite Communications in BT's Global 278
New Cooperative Framework for European Public Network Operators, A 141
New Opportunity for Collaborative R&D in European Telecommunications, EURESCOM—A 294
New Road and Street Works Act 122
NIE, TUN CHUN; and HILTON, RONALD D. Outsourcing Service and Information Technology Analysis—Part 1 132
NIE, TUN CHUN; and HILTON, RONALD D. Outsourcing Service and Information Technology Analysis—Part 2 222
NISTAR, BT Northern Ireland STAR SDH Network— 207
Northern Ireland STAR SDH Network—NISTAR, BT 207
Notes and Comments 327
Numbering and Addressing S9.5

O

Office You Wish You Had, The 91
Offshore Digital Line-of-Sight Radio Service, Provision of an 9
Operational Principles for Third-Generation Mobile Systems, Network 62
Opportunity for Collaborative R&D in European Telecommunications, EURESCOM—A New 294
Optical Communications, Future Trends in Fibre-Based S5.4
Outsourcing and Communications Facilities Management 71
Outsourcing Service and Information Technology Analysis—Part 1 132
Outsourcing Service and Information Technology Analysis—Part 2 222
Overview, Corporate Visual Services—An 97

P

PARKIN, MICHAEL. Assessment of Network Performance: The ISDN2 Performance Analyser 110
PARRY, MIKE. 32nd European Telecommunications Congress ... 312
PARSONS, TIMOTHY; LISLE, PETER; and MARSHALL, JOHN. Access Network Technology: Design Principles S10.2
Partnership, SuperJANET—A Strategic 216
Payphone Activities and Developments in North Downs 318
Payphones, Robotic Duty Cycle Testing of 32
PC-Based Visual Communications Services 266
PEACE, MIKE; and STAGG, BARRY. Telconsult: BT's World Consultancy Service 189
PEARSON, IAN; GREENOP, DAVID; and JOHNSON, TREVOR. Broadband—Liberating the Customer 252
Performance: The ISDN2 Performance Analyser, Assessment of Network 110
PILGRIM, LEWIS. Investment Appraisal S4.4
Planning, Screen-Based 318
Planning the International Network 165
Practical Benchmarking 290
PRIOR, JOHN. Broadening the Issues (Editorial to January 1994 edition) 241
Provision of an Offshore Digital Line-of-Sight Radio Service 9
Public Network Operators, A New Cooperative Framework for European 141

Q

QUAYLE, ALAN; and HUMPHREYS, ANDY. Method for Compatible Coding of HDTV and TV, A 146
Quality of Digital Circuit Multiplication and Low Rate Encoding, Transmission 38

R

R&D in European Telecommunications, EURESCOM—A New Opportunity for Collaborative 294
Radio Service, Provision of an Offshore Digital Line-of-Sight 9
RAISTRICK, MICHAEL. Outsourcing and Communications Facilities Management 71
READ, MIKE. BT Global Network, The 162
READ, MIKE. Supporting BT's Global Vision (Guest Editorial, October 1993) 161
Regulations in the UK, Telecommunications S16.1
REIFFER, GUY; ANWAR, M. ASIF; COLE, ROGER; and ANDREWS, MIKE. BT Northern Ireland STAR SDH Network—NISTAR 207
RICHARDS, BILL; and BORWICK, DICK. Submarine Cable Systems 272
Road and Street Works Act, New 122
Robotic Duty Cycle Testing of Payphones 32
RODGERS, DEREK. Harlow TPON Pilot Project 316
Role of Satellite Communications in BT's Global Networks, The 278
ROOK, TED; and GREEN, STEVE. BT's Internal Network 22
RUDGE, ALAN W. I'll Be Seeing You: Multimedia Communications in the 21st Century 242
RUSSELL, SID; and COLEMAN, PETER. New Road and Street Works Act 122
RYBACKI, TONY; and WARREN, GRAHAM. BT Broadcast and Satellite Services 200

S

Satellite Communications in BT's Global Networks, The Role of 278
Satellite Services, BT Broadcast and 200
SCOTT, ADAM. Apparatus—Gateway to the Network 260
Screen-Based Planning 318
SDH Network—NISTAR, BT Northern Ireland STAR 207
Service and Information Technology Analysis—Part 1, Outsourcing 132
Service and Information Technology Analysis—Part 2, Outsourcing 222
Service, Provision of an Offshore Digital Line-of-Sight Radio .. 9
Service: The Differentiator for the 1990s, Marketing Customer 2
Services—An Overview, Corporate Visual 97
Services, BT Broadcast and Satellite 200
Services Digital Network, The Integrated S9.4
Services for the ISDN, Standardisation of 56
Services, PC-Based Visual Communications 266
Signalling, ISDN Access 302
SMITH, NICK. Screen-Based Planning 318
Spectrum Management S16.3
SPOONER, MIKE. Network Management in a Modern Digital Network S13.3

STAGG, BARRY; and PEACE, MIKE. Telconsult: BT's World Consultancy Service 189
Standardisation of Services for the ISDN 56
Standards: An Overview, ISDN 47
Standards for ISDN Architecture 114
STAR SDH Network—NISTAR, BT Northern Ireland 207
Strategic Partnership, SuperJANET—A 216
Street Works Act, New Road and 122
STUART, ALAN; and COXHEAD, PAUL. Role of Satellite Communications in BT's Global Networks, The 278
Submarine Cable Systems 272
SuperJANET—A Strategic Partnership 216
Systems Engineering in BT's Account Management 87
Systems Engineering in BT's Account Management—The Bid Manager 183
Systems, Network Operational Principles for Third-Generation Mobile 62
Systems, Submarine Cable 272

T

TAYLOR-HENDRY, ROB; FISHER, KIM; and COCHRANE, PETER. The Office You Wish You Had 91
Technology: Design Principles, Access Network S10.2
Telecommunications Business Model, The S4.3
Telecommunications Congress, 32nd European 312
Telecommunications, EURESCOM—A New Opportunity for Collaborative R&D in European 294
Telecommunications Regulations in the UK S16.1
Telex Network: Past Present—and Future?, BT's 17
Telco Engineer an Endangered Species?, Is the 67
Telconsult: BT's World Consultancy Service 189
Testing of Payphones, Robotic Duty Cycle 32
Third-Generation Mobile Systems, Network Operational Principles for 62
32nd European Telecommunications Congress 312
TODD, CHRIS. Future Trends in Fibre-Based Optical Communications S5.4
TPON Pilot Project, Harlow 316
Transmission Quality of Digital Circuit Multiplication and Low Rate Encoding 38
Trends in Fibre-Based Optical Communications, Future S5.4
Trying to Keep the Customer Satisfied 285
TV, A Method for Compatible Coding of HDTV and 146

V

Visual Communications Services, PC-Based 266
Visual Services—An Overview, Corporate 97

W

WARD, KEITH. The Telecommunications Business Model S4.3
WARDLAW, MALCOLM; and GALLAGHER, IAN. Asynchronous Transfer Mode S6.3
WARREN, GRAHAM; and RYBACKI, TONY. BT Broadcast and Satellite Services 200
WHEELER, JOHN. Managing Customer Relationships (Guest Editorial, July 1993) 81
WHITE, PAUL; HEAD, MICK; and MORGAN, NEIL. SuperJANET—A Strategic Partnership 216
WILLIAMS, KEITH; and LAW, BRIAN. ISDN Access Signalling 302
World Consultancy Service, Telconsult: BT's 189
WRIGHT, BRIAN. Trying to Keep the Customer Satisfied 285

VOLUME 12

Part 1 (Apr. 1993) ..... pp. 1–80
Part 2 (Jul. 1993) ..... pp. 81–160
Part 3 (Oct. 1993) ..... pp. 161–240
Part 4 (Jan. 1994) ..... pp. 241–328

STRUCTURED INFORMATION PROGRAMME

Chapter	Unit	Title	Issue	(Journal)
4	3	The Telecommunications Business Model	8	(Apr. 1993)
4	4	Investment Appraisal	9	(Jul. 1993)
5	4	Future Trends in Fire-Based Optical Communications	10	(Oct. 1993)
6	3	Asynchronous Transfer Mode	11	(Jan. 1994)
9	4	The Integrated Services Digital Network	9	(Jul. 1993)
9	5	Numbering and Addressing	10	(Oct. 1993)
10	2	Access Network Technology: Design Principles	8	(Apr. 1993)
11	4	Facsimile	8	(Apr. 1993)
13	3	Network Management in a Modern digital Network	9	(Jul. 1993)
16	1 *	Telecommunications Regulations in the UK	10	(Oct. 1993)
16	3	Spectrum Management	11	(Jan. 1994)

* Revised

Published by *British Telecommunications Engineering Journal*, 2–12 Gresham Street, London EC2V 7AG
and printed in Great Britain by Unwin Brothers Limited, Old Woking, Surrey